

Descriptions of two new species of the genus *Ypthima* Hübner (Lepidoptera: Satyridae) from North and Central Vietnam

Yoshinobu UÉMURA¹⁾ and Alexander L. MONASTYRSKII²⁾

¹⁾Toyosato Museum of Entomology, Tohigashi 676, Tsukuba, Ibaraki, 300-2633 Japan

²⁾Vietnam-Russia Tropical Centre, Nghia Do-Cau Giay, Hanoi, Vietnam

Abstract Two new species, *Ypthima frontierii* sp. nov. and *Y. pseudosavara* sp. nov., from North and Central Vietnam are described and illustrated.

Key words Taxonomy, Lepidoptera, Satyridae, *Ypthima*, *Ypthima frontierii* sp. nov., *Ypthima pseudosavara* sp. nov., Oriental region, Vietnam.

During our joint study of satyrid butterflies from north and central Vietnam we found two new species belonging to the genus *Ypthima* Hübner. Before compiling a revisional catalogue of the genus *Ypthima* from Vietnam in a forthcoming paper, we describe them in the following lines as taxa new to science.

Ypthima frontierii Uémura & Monastyrskii, **sp. nov.** (Figs 1a–c, 2, 4–9)

Wet-season form ♂ (Figs 4–5). Upperside of forewing: Ground colour umber brown; inner and outer discal fasciae absent; submarginal fascia dark, weakly developed; marginal fascia indistinct; subapical ocellus large, slightly oblique, black, bipupilled and rather narrowly yellow-ringed; fringe dark brown; brand invisible to naked eye. Upperside of hindwing: Ground colour umber brown; inner and outer discal fasciae absent; submarginal fascia as on forewing, but broadened in spaces 3, 4 and 5; unipupilled ocellus present in space 2, single minute ocellus absent in space 1b; fringe dark brown. Underside of forewing: Ground colour greyish-brown, closely and delicately striated with dark brown; inner and outer discal fasciae absent; submarginal fascia weakly developed; marginal fascia dark and distinct; subapical ocellus large, slightly oblique, black, bipupilled and broadly yellow-ringed; fringe dark brown. Underside of hindwing: Ground colour greyish-brown; closely and delicately striated with dark brown; inner and outer discal fasciae absent; submarginal fascia absent; marginal fascia dark and distinct; large single pupilled subapical ocellus present in space 6; small single pupilled subternal ocellus present in space 2; bipupilled small ocellus present in space 1b; fringe dark brown.

Wet-season form ♀. Marking generally the same as in the male.

Dry-season form ♂ (Figs 6–7). Marking generally the same as in the wet-season form. Underside of hindwing: whitish band from apex to middle of inner margin similar to *Ypthima insolita* Leech, 1891; all ocelli reduced to black dots.

Dry-season form ♀ (Figs 8–9). Marking generally the same as in the male. Ground colour slightly paler.

Androconia (Figs 1a–c). Very short, bottle-like shaped base with very slender, prolonged neck.

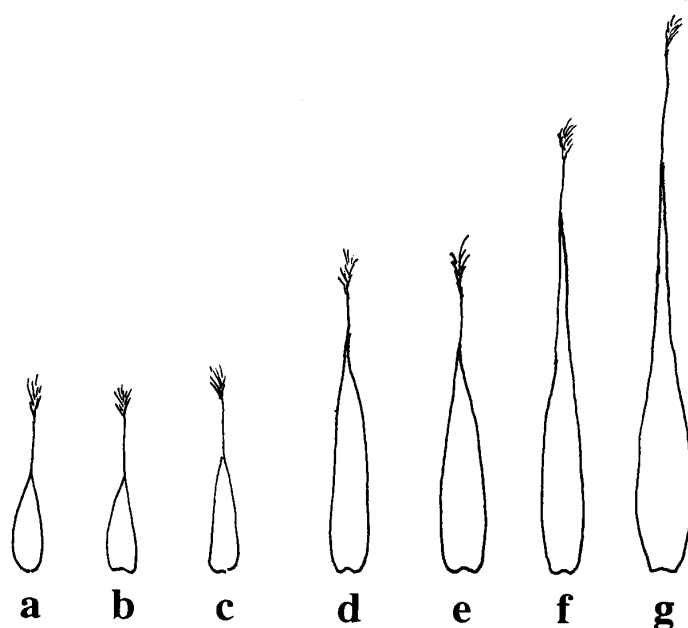


Fig. 1. Androconia of *Ypthima* spp. a-c. *Y. frontieri* sp. nov. d-e. *Y. pseudosavara* sp. nov. f-g. *Y. savara tonkiniana* Fruhstorfer (f: Ben En National Park, North Annam, g: Ba Be National Park, Tonkin).

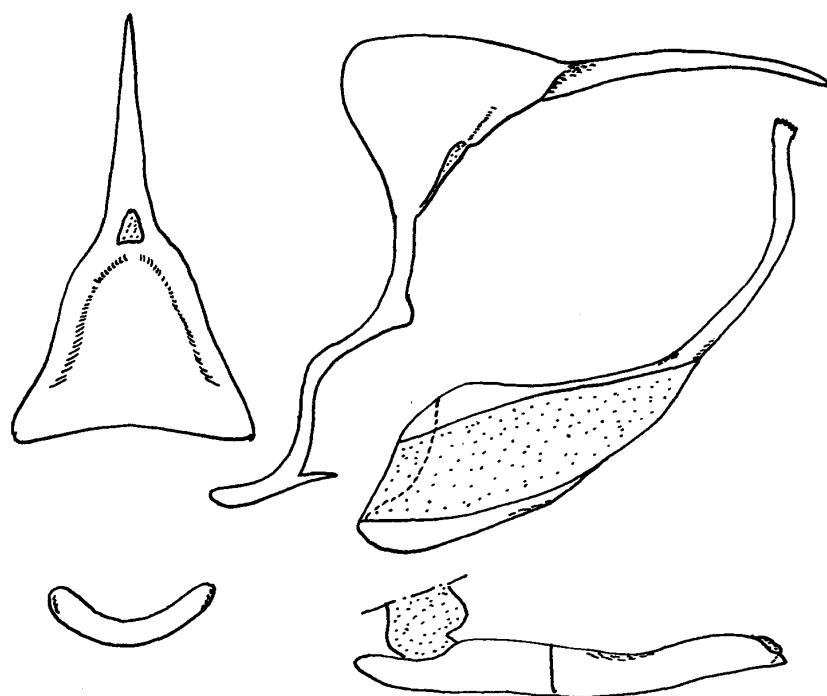
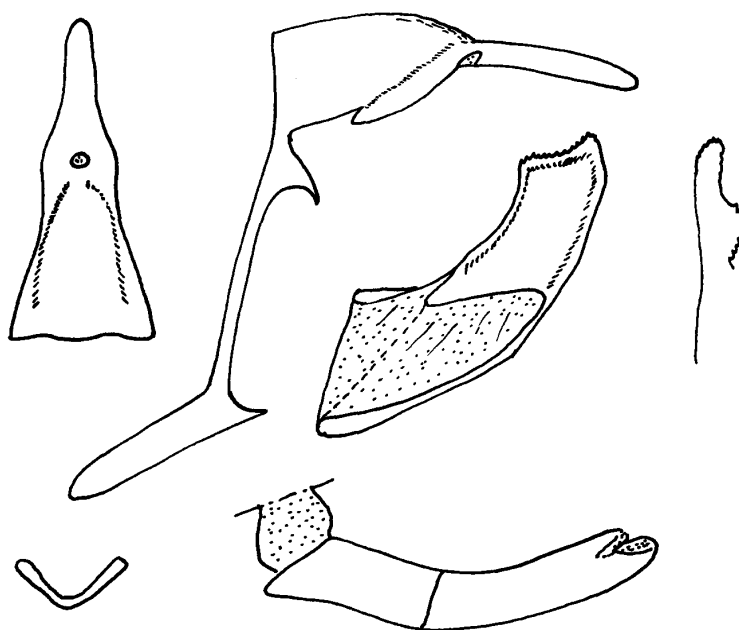
Male genitalia (Fig. 2). Tegumen in dorsal view broad at base and narrowed posteriorly, posterior margin rather strongly bulged and gradually sunk; in lateral view distinctly higher than vinculum; appendix angularis short and broad, not curved inward. Uncus subequal in length to tegumen, gradually tapering to apex; in lateral view not curved ventrally, with very narrow membranous slit at the base. Fenestrula of a rather broad membranous dorsal spot. Saccus less than $1/4\times$ as long as ring. Aedeagus in lateral view rather weakly curved upwards. Valva in lateral view rather broad at base and strongly narrowed beyond middle; costa continuous to ampulla+harpe; apex serrate laterodistally.

Length of forewing. ♂, 21.0–22.0 mm ($n=5$); ♀, 22.0–23.0 mm ($n=2$).

Geographical distribution. North Vietnam. So far the species has been found in the Hoang Lien Nature Reserve near Sapa settlement.

Holotype ♂ (dry-season form), North Vietnam, Lao Cai Province, Sa Pa alt. ca 2,000 m (103°46'E, 22°15'N), iii. 1995 (collected by the organization Frontier-Vietnam), preserved in Toyosato Museum of Entomology, Tsukuba. Paratypes. 2 ♂ 1 ♀ (dry-season form), North Vietnam, Lao Cai Province, Sa Pa, iii. 1995 (collected by the organization Frontier-Vietnam); 1 ♂ (dry-season form), North Vietnam, Lao Cai Province, Hoang Lien Nature Reserve, 19. ii. 1998 (collected by the organization Frontier-Vietnam); 3 ♂ 1 ♀ (wet-season form), North Vietnam, Lao Cai Province, Hoang Lien Nature Reserve alt. ca 1,600 m, 22–25. viii. 1998 (collected by Vu Van Lien); 1 ♂ (wet-season form), North Vietnam, Lao Cai Province, Hoang Lien Nature Reserve, 31. vii. 1998 (collected by Bui Xuan Phuong). Preserved in Toyosato Museum of Entomology, Tsukuba, and Vietnam-Russia Tropical Centre, Hanoi.

Remarks. This new species belongs to the *megalomma*-group (*sensu* Shirôu & Shima, 1979; Shima, 1988). It seems to be distinguishable from all other known species of the *megalom*-

Fig. 2. Male genitalia of *Ypthima frontierii* sp. nov.Fig. 3. Male genitalia of *Ypthima pseudosavara* sp. nov.

ma-group by the following combination of characteristics. In both dry- and wet-season forms, the subapical ocellus on upperside of forewing is almost round and the submarginal fascia on upperside of forewing is distinctly dark although weakly developed. In wet-season form, the subapical ocellus in space 6 is larger than subtornal ocellus in space 2 on underside of hindwing. In dry-season form, a whitish band from apex to middle of inner margin is similar to *Y. insolita* Leech, 1891. In the male genitalia, dorsal margin of valva lacks a short

or very strong process.

The new species is dedicated to the organization Frontier-Vietnam, which collected it for the first time.

Ypthima pseudosavara Uémura & Monastyrskii, **sp. nov.** (Figs 1d-e, 3, 10-13)

Wet-season form ♂ (Figs 10-13). Upperside of forewing: Ground colour greyish-brown; inner discal fascia absent; outer discal fascia dark, weakly developed; submarginal fascia dark, rather developed; marginal fascia distinct; subapical ocellus large, black, single pupilled and rather broadly yellow-ringed, placed within a large pale area which narrows posteriorly and reaches vein 1b; fringe dark brown; brand invisible to naked eye. Upperside of hindwing: Ground colour greyish-brown; inner discal fascia indistinct; outer discal fascia dark and weakly developed; submarginal fascia dark, rather prominent; unipupilled ocellus present in spaces 2 and 3, double minute ocelli present in space 1b, additional small ocelli sometimes present in spaces 5 and 6; all ocelli placed in a pale band; fringe dark brown. Underside of forewing: Ground colour greyish-brown, sparsely striated with dark brown; inner and outer discal fasciae dark, prominent; submarginal fascia weakly developed; marginal fascia distinct; subapical ocellus large, slightly oblique, black, bipupilled and broadly yellow-ringed; fringe dark brown. Underside of hindwing: Ground colour greyish-brown; sparsely striated with dark brown; inner and outer discal fasciae dark, prominent; submarginal fascia weakly developed; marginal fascia distinct; with six ocelli in pairs, single pupilled subapical small ocelli present in spaces 5 and 6, medium sized single pupilled subternal ocelli present in spaces 2 and 3, double minute ocelli present in space 1b; fringe dark brown.

Wet-season form ♀. Marking generally the same as in the male.

Dry-season form. Unknown.

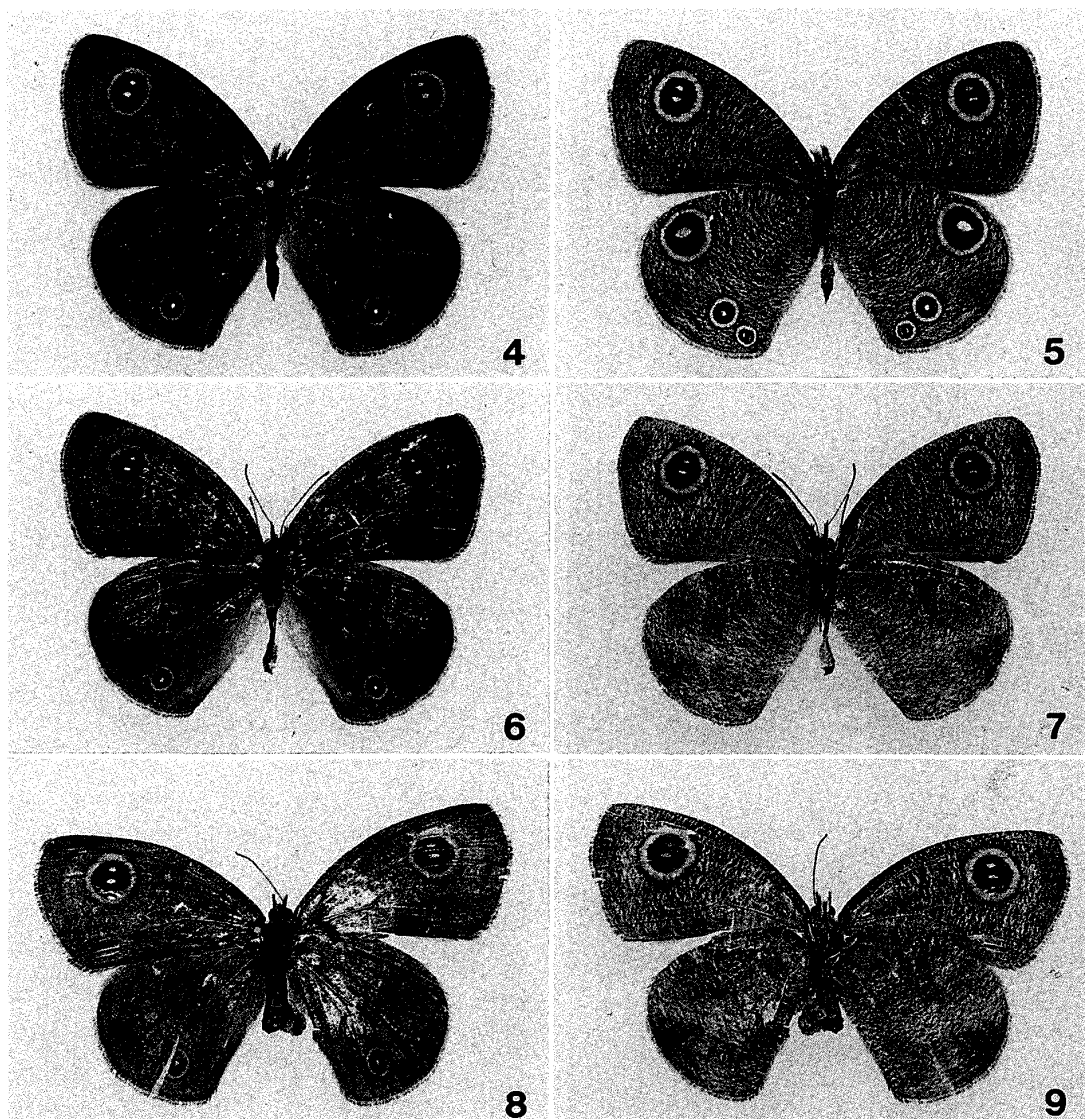
Androconia (Figs 1d-e). Rather short, relatively long triangular base and gradually narrowed towards apex.

Male genitalia (Fig. 3). Tegumen in dorsal view rather narrow, weakly narrowed posteriorly; in lateral view nearly subequal in height to vinculum; appendix angularis long and broad, weakly curved inward. Uncus in lateral view weakly curved downwards, with rather broad membranous slit at the base. Fenestrula of a membranous dorsal spot. Saccus approximately $1/2 \times$ as long as ring. Aedeagus in lateral view more or less strongly curved dorsally. Valva rather broad, in lateral view concave at middle of apical portion; ampulla+harpe strongly projected as a cork-screw; costa long and narrow.

Length of forewing. ♂, 22.0-25.5 mm ($n=3$).

Geographical distribution. Northern sites of central Vietnam.

Holotype ♂, Central Vietnam, Thanh Hoa Province, Nhu Xuan district, Ben En National Park (105°21'-105°35'E, 19°30'-19°40'N), 24. vii. 1997 (collected by the organization Frontier-Vietnam), preserved in Toyosato Museum of Entomology, Tsukuba. Paratypes. 2 ♂, Central Vietnam, Thanh Hoa Province, Nhu Xuan district, Ben En National Park, 31. vii. 1997 and 1. viii. 1997 (collected by the organization Frontier-Vietnam); 2 ♂, Central Vietnam, Nghe An Province, Pu Mat Nature Reserve, 4-8. vii. 1998 (collected by the organization Fauna & Flora International); 1 ♂, Central Vietnam, Thanh Hoa Province, Xuan Lien Nature Reserve, 450 m, bamboo, 29. x. 1998 (collected by A. Monastyrskii); 1 ♂

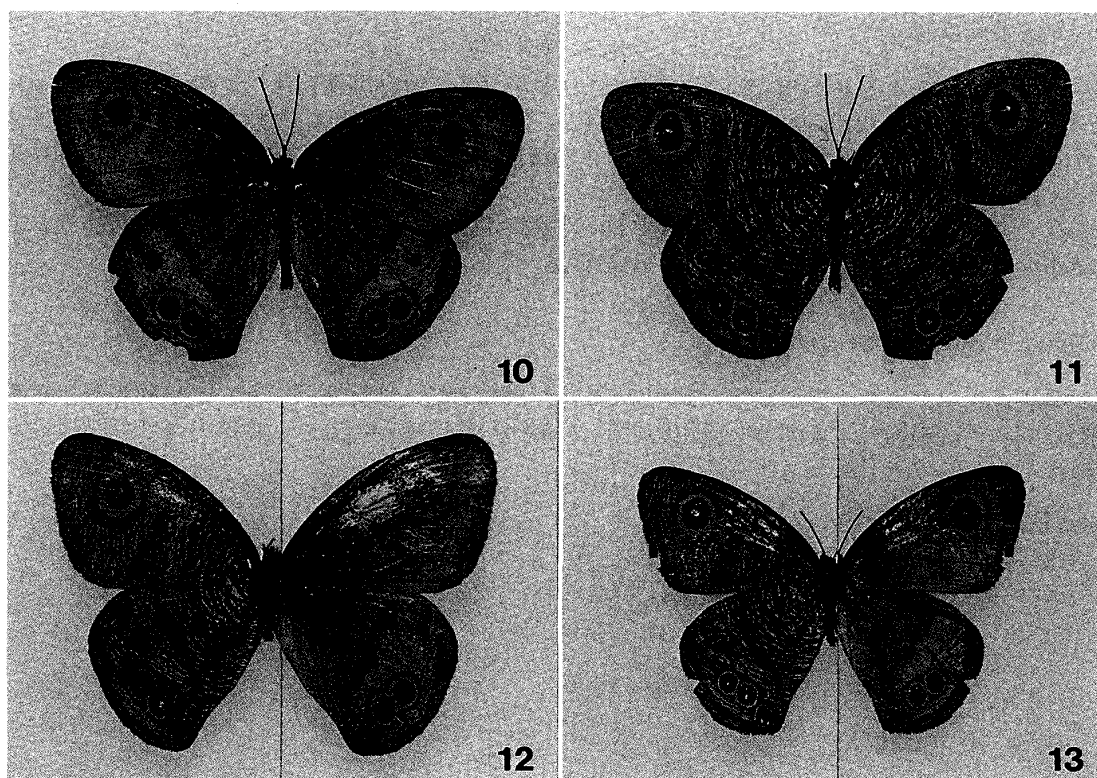


Figs 4–9. *Ypthima frontierii* sp. nov. 4. Paratype ♂ (wet-season form), upperside. 5. *Ditto*, underside. 6. Holotype ♂ (dry-season form), upperside. 7. *Ditto*, underside. 8. Paratype ♀ (dry-season form), upperside. 9. *Ditto*, underside.

1 ♀, Central Vietnam, Nghe An Province, Pu Hoat Nature Reserve, 16–18. iv. 1999 (collected by the organization Frontier-Vietnam). Preserved in Toyosato Museum of Entomology, Tsukuba, and Vietnam-Russia Tropical Centre, Hanoi.

Remarks. This new species belongs to the *sakra*-group (*sensu* Shirôzu & Shima, 1979; Shima, 1988), and it is easily distinguishable from all other species of the *sakra*-group by the unusual greyish-brown ground colour. It seems to be most closely related to *Y. savara* Grose-Smith, 1887 judging from the structure of the male genitalia and the shape of androconia. In Ben En National Park, this new species flies with *Y. savara tonkiniana* Fruhstorfer, 1911 which occurs from north to central Vietnam.

This new species was caught for the first time by volunteers from the organization Frontier-Vietnam (United Kingdom) in Ben En National Park (North Annam).



Figs 10-13. *Ypthima pseudosavara* sp. nov. 10. Holotype ♂, upperside. 11. *Ditto*, underside. 12. Paratype ♂, upper- and underside. 13. *Ditto*, upper- and underside.

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摘 要

北部および中部ベトナム産ウラナミジャノメ属 (鱗翅目, ジャノメチョウ科) の2新種の記載 (植村好延・Alexander L. Monastyrskii)

著者らは、ベトナム産のウラナミジャノメ属の総説をまとめるにあたり、2新種を見出したので、総説に先行してここに記載する。

1. *Ypthima frontierii* sp. nov.

ベトナム北部のサパおよびその周辺地域で得られた 8 ♂ 2 ♀ (雨期型 4 ♂ 1 ♀, 乾期型 4 ♂ 1 ♀) で記載した。本新種は *megalomma* グループに所属し, 雨期型, 乾期型ともに前翅表面の眼状紋がほぼ円形に近いこと, 前翅表面の亜外縁条が発現は弱い濃色であること, 雨期型では後翅裏面の第 6 室の眼状紋は第 2 室の眼状紋よりも明瞭に大型となること, 乾期型では後翅裏面は *Y. insolita* のように雲形の斑紋を装おうこと, ♂ 交尾器の valva 背面に独特の突起を欠くことなどの特徴を総合することで *megalomma* グループに属する他のすべての既知種から区別される。

2. *Ypthima pseudosavara* sp. nov.

ベトナム中部のベンエン他 3 箇所得られた 7 ♂ 1 ♀ (雨期型) (乾期型は未知) で記載した。本新種は *sakra* グループに所属し, 表面の灰褐色の地色で *sakra* グループに属する他のすべての既知種から区別される。

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